

SEQUENCE LISTING

<110> Hartley, James L.  
Brasch, Michael A.  
Temple, Gary F.  
Fox, Donna K.

<120> Recombinational Cloning Using Nucleic Acids Having  
Recombination Sites

<130> 0942.2850004

<140> US 09/177,387

<141> 1998-10-23

<150> US 60/065,930

<151> 1997-10-24

<160> 60

<170> PatentIn Ver. 2.0

<210> 1

<211> 25

<212> DNA

<213> Unknown

<220>

<221> OTHER

<222> 10

<223> "n" may be any nucleotide

<223> Description of Unknown Organism: recombination  
products

<400> 1

rkycwgcttt yktrtacnaa stsgb

25

<210> 2

<211> 25

<212> DNA

<213> Unknown

<220>  
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<223> "n" may be any nucleotide  
<223> Description of Unknown Organism: recombination  
products

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agccwgcttt yktrtacnaa ctsgb 25

<210> 3  
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<220>  
<221> OTHER  
<222> 18  
<223> "n" may be any nucleotide  
<223> Description of Unknown Organism: recombination  
products

<400> 3  
gttcagcttt cktrtacnaa ctsgb 25

<210> 4  
<211> 25  
<212> DNA  
<213> Unknown

<220>  
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<222> 18  
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<223> Description of Unknown Organism: recombination  
products

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agccwgcttt cktrtacnaa gtsgb 25

<210> 5  
<211> 25  
<212> DNA  
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<220>  
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<222> 18  
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<223> Description of Unknown Organism: recombination  
products

<400> 5  
gttcagcttt yktrtacnaa gtsgb 25

<210> 6  
<211> 25  
<212> DNA  
<213> Unknown  
  
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products

<400> 6  
agcctgcttt tttgtacaaa cttgt 25

<210> 7  
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<212> DNA  
<213> Unknown

<220>  
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products

<400> 7  
agcctgcttt cttgtacaaa cttgt 25

<210> 8  
<211> 25

<212> DNA

<213> Unknown

 $\langle 220 \rangle$ 

<223> Description of Unknown Organism: recombination products

<400> 8

accagcttt cttgtacaaa gtggt

25

<210> 9

<211> 25

<212> DNA

<213> Unknown

<220>

<223> Description of Unknown Organism: recombination products

<400> 9

gttcagcttt tttgtacaaa cttgt

25

<210> 10

<211> 25

<212> DNA

<213> Unknown

 $\langle 220 \rangle$ 

<223> Description of Unknown Organism: recombination products

<400> 10

gttcagcttt cttgtacaaa cttgt

25

<210> 11

<211> 25

<212> DNA

<213> Unknown

<220>

<223> Description of Unknown Organism: recombination products

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gttcagcttt cttgtacaaa gtggt 25

<210> 12  
<211> 25  
<212> DNA  
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<220>  
<223> Description of Unknown Organism: recombination  
products

<400> 12  
agcctgcttt tttgtacaaa gttgg 25

<210> 13  
<211> 25  
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<220>  
<223> Description of Unknown Organism: recombination  
products

<400> 13  
agcctgcttt cttgtacaaa gttgg 25

<210> 14  
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<213> Unknown

<220>  
<223> Description of Unknown Organism: recombination  
products

<400> 14  
accagcttt cttgtacaaa gttgg 25

<210> 15

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<211> 25

<212> DNA

<213> Unknown

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<223> Description of Unknown Organism: recombination  
products

<400> 15

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25

<210> 16

<211> 25

<212> DNA

<213> Unknown

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<223> Description of Unknown Organism: recombination  
products

<400> 16

gttcagcttt cttgtacaaa gttgg

25

<210> 17

<211> 39

<212> DNA

<213> Unknown

<220>

<223> Description of Unknown Organism: recombination  
products

<400> 17

ccaccacaaa cgcgtccatg gaattacact ttaatttag

39

<210> 18

<211> 39

<212> DNA

<213> Unknown

<220>

<400> 18

39

<210> 19

<211> 46

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 19

ggccgattac gatatcccaa cgaccgaaaa cctgtatattt caggggt

46

<210> 20

<211> 30

<212> DNA

<213> Artificial Sequence

 $\langle 220 \rangle$ 

<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 20

caggttttcg gtcgttggga tatcgtaatc

30

<210> 21

<211> 47

<212> DNA

<213> Artificial Sequence

 $\langle 220 \rangle$ 

<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 21

ggccagatta cgatatccca acgaccgaaa acctgtattt tcaggggt

47

<210> 22  
<211> 31  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
oligonucleotide

<400> 22  
caggttttcg gtcgttgga tatcgtaatc t 31

<210> 23  
<211> 48  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
oligonucleotide

<400> 23  
ggccaagatt acgatatccc aacgaccgaa aacctgtatt ttcagggt 48

<210> 24  
<211> 32  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: synthetic  
oligonucleotide

<400> 24  
caggttttcg gtcgttgga tatcgtaatc tt 32

<210> 25  
<211> 15  
<212> DNA  
<213> Artificial Sequence



<223> Description of Artificial Sequence: synthetic oligonucleotide

accgtttacg tggac

15

<211> 31

<212> DNA

### <213> Artificial Sequence

<223> Description of Artificial Sequence: synthetic oligonucleotide

tcgagtccac gtaaacgggtt cccacttatt a

31

<211> 39

<212> DNA

<213> Artificial Sequence

<223> Description of Artificial Sequence: synthetic oligonucleotide

uauuuucagg guatggagaa aaaaatcact ggatatacc

39

<210> 28

&lt;211&gt; 33

<212> DNA

<213> Artificial Sequence

<223> Description of Artificial Sequence: synthetic oligonucleotide

<400> 28

ucccacuuau uacgccccgc cctgcactc atc

33

<210> 29

<211> 33

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
oligonucleotide

<400> 29

uauuuucagg guatgcctgt tctggaaaac cgg

33

<210> 30

<211> 34

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
oligonucleotide

<400> 30

ucccacuuau uatttcagcc ccagggcggc ttcc

34

<210> 31

<211> 58

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
oligonucleotide

<400> 31

tccgttgaag cctgcttttt tataactaact tgagcgaagc ctcgggggtca gcataagg

58

<210> 32

<211> 58

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
oligonucleotide

<400> 32

ccaataactt cgtatagcat acattatacg aagttattgc cccttggtga cataactcg 58

<210> 33

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
oligonucleotide

<400> 33

tcactagtcg gcggcccaca 20

<210> 34

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
oligonucleotide

<400> 34

gagcggcccc cgcggaccac 20

<210> 35

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
oligonucleotide

<400> 35

ggcccacaag tttgtacaaa a

21

<210> 36

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
oligonucleotide

<400> 36

ccccgcggac cactttgtac

20

<210> 37

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
oligonucleotide

<400> 37

acaagtttgt acaaaaaaagc a

21

<210> 38

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
oligonucleotide

<400> 38

accactttgt acaagaaagc t

21

<210> 39

<211> 25

<212> DNA

<213> Unknown

<220>

<223> Description of Unknown Organism: recombination  
products

<400> 39

rbycwgcttt yttitacwaa stkgd

25

<210> 40

<211> 25

<212> DNA

<213> Unknown

<220>

<223> Description of Unknown Organism: recombination  
products

<400> 40

asccwgcttt yttirtacwaa stkgw

25

<210> 41

<211> 25

<212> DNA

<213> Unknown

<220>

<223> Description of Unknown Organism: recombination  
products

<400> 41

asccwgcttt yttirtacwaa gttgg

25

<210> 42

<211> 25

<212> DNA

<213> Unknown

<220>

<223> Description of Unknown Organism: recombination products

<400> 42

gttcagcttt yttrtacwaa stkgw

25

<210> 43

<211> 25

<212> DNA

<213> Unknown

<220>

<223> Description of Unknown Organism: recombination products

<400> 43

gttcagcttt yttrtacwaa gttgg

25

<210> 44

<211> 25

<212> DNA

<213> Unknown

<220>

<223> Description of Unknown Organism: recombination products

<400> 44

tcggacgaaa aaatatgatt gaact

25

<210> 45

<211> 25

<212> DNA

<213> Unknown

<220>

<223> Description of Unknown Organism: recombination products

<400> 45

tcggacgaaa aaacatgttt gaaca

25

<210> 46

<211> 25

<212> DNA

<213> Unknown

<220>

<223> Description of Unknown Organism: recombination  
products

<400> 46

tcggacgaaa gaacatgttt gaaca

25

<210> 47

<211> 25

<212> DNA

<213> Unknown

<220>

<223> Description of Unknown Organism: recombination  
products

<400> 47

tgggtcgaaa gaacatgttt cacca

25

<210> 48

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
oligonucleotide

<400> 48

aattctcatg tttgacagct tatc

24

<210> 49

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
oligonucleotide

<400> 49

cgatggatat gttctgccaa g

21

<210> 50

<211> 49

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
oligonucleotide

<400> 50

acaagtttgt acaaaaaagc aggctaattc tcatgtttga cagcttatac

49

<210> 51

<211> 46

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
oligonucleotide

<400> 51

accactttgt acaagaaaagc tgggtcgatg gatatgttct gccaag

46

<210> 52

<211> 53

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
oligonucleotide



<400> 52

ggggacaagt ttgtacaaaa aagcaggcta attctcatgt ttgacagctt atc

53

<210> 53

<211> 50

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
oligonucleotide

<400> 53

ggggaccact ttgtacaaga aagctgggtc gatggatatg ttctgccaag

50

<210> 54

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
oligonucleotide

<400> 54

aatacattca aatatgtatc cgc

23

<210> 55

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
oligonucleotide

<400> 55

ttaccaatgc ttaatcagtg ag

22

<210> 56

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
oligonucleotide

<400> 56

acaagtttgt acaaaaaagc aggctaatac attcaaatat gtatccgc

48

<210> 57

<211> 47

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
oligonucleotide

<400> 57

accactttgt acaagaaagc tgggtttacc aatgcttaat cagtgcg

47

<210> 58

<211> 52

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: synthetic  
oligonucleotide

<400> 58

ggggacaagt ttgtacaaaa aagcaggcta atacattcaa atatgtatcc gc

52

<210> 59

<211> 51

<212> DNA

<213> Artificial Sequence

51

ggggaccact ttgtacaaga aagctggggtt taccaatgct taatcagtga g

<213> Unknown

<223> Description of Unknown Organism: recombination products

agcctgcttt tttatactaa cttga

25

[illegible]